October 1999

DEFENSE INVENTORY

Improved Management Framework Needed to Guide Navy Best Practice Initiatives

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DTIC QUALITY INSPECTED 4

G A O
Accountability ★ Integrity ★ Reliability

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Contents

Abbreviations

DOD   Department of Defense

Contents

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National Security and
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Congressional Committees

Section 347 of the Strom Thurmond National Defense Authorization Act for
Fiscal Year 1999 requires the secretary of each military department to
submit to Congress a schedule for implementing best commercial
inventory practices for the acquisition and distribution of secondary
inventory items.[1] Best commercial inventory practices are defined as
practices that enable the military departments to reduce inventory levels
while improving the responsiveness of the supply system to user needs.
Section 347 further requires that the schedule provide for implementation
of such best practices to be completed within 5 years of enactment, or by
October 17, 2003. The section also requires us to evaluate the extent to
which the secretary of each military department has complied with the
act's requirements.

In this report, we discuss our evaluation of the Department of the Navy's
best practices implementation schedule for the acquisition and distribution
of secondary inventory items, which the Department of the Navy submitted
to Congress on June 16, 1999. In our evaluation, we (1) determined the
extent to which the schedule responds to the provisions of the act and
(2) identified specific elements of a management framework needed for
effective implementation and oversight of the Department of the Navy's
best practice initiatives.

Results in Brief

The Department of the Navy's schedule is generally responsive to the act.
Specifically, the schedule describes 25 initiatives that address the
acquisition and distribution of secondary items managed by the Navy and
the Marine Corps. These initiatives are primarily aimed at improving the
Navy and Marine Corps planning, sourcing, delivery, and maintenance
processes. While some of the initiatives did not include specific time
frames to complete implementation, the Secretary of the Navy advised

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[1] Secondary inventory includes spare parts, clothing, and medical supplies to support
Department of Defense (DOD) operating forces worldwide.

Congress that with few exceptions, implementation of the initiatives is expected to be completed by 2003.

Though generally responsive to the act's requirements, the management framework that is outlined in the schedule lacks specific elements that are needed to assess implementation progress, measure success and identify needed changes. As a result, while the schedule describes an overall implementation strategy, it does not provide sufficient information for Congress and Defense managers to measure the progress and results of the initiatives. Also, the management framework contained in the schedule does not provide a clear link to top-level DOD improvement goals or provide details for periodic evaluation of an initiative's progress. In our prior work, we noted that the lack of such information contributed to DOD's difficulty in implementing new initiatives. The Government Performance and Results Act offers a model for developing an effective management framework to improve the likelihood of successfully implementing initiatives and assessing results.

To ensure that progress and results information is available to Congress and Defense managers, we are recommending that the Secretary of the Navy develop a Results Act management approach for implementing the 25 initiatives.

Background

To provide consumable and reparable parts for its ships, aircraft, and ground equipment, the Department of the Navy uses an extensive logistics system that is based on management processes, procedures, and concepts that have evolved over time. Reparable parts are expensive items that can be fixed and used again, such as hydraulic pumps, navigational computers, engines, and landing gear. The naval logistics system, often referred to as a logistics pipeline or supply chain, involves several interrelated activities that play a role in providing parts where and when they are needed.[2] These activities include the purchase, storage, repair, and distribution of parts, which together require billions of dollars of investments in personnel, equipment, facilities, and inventory.
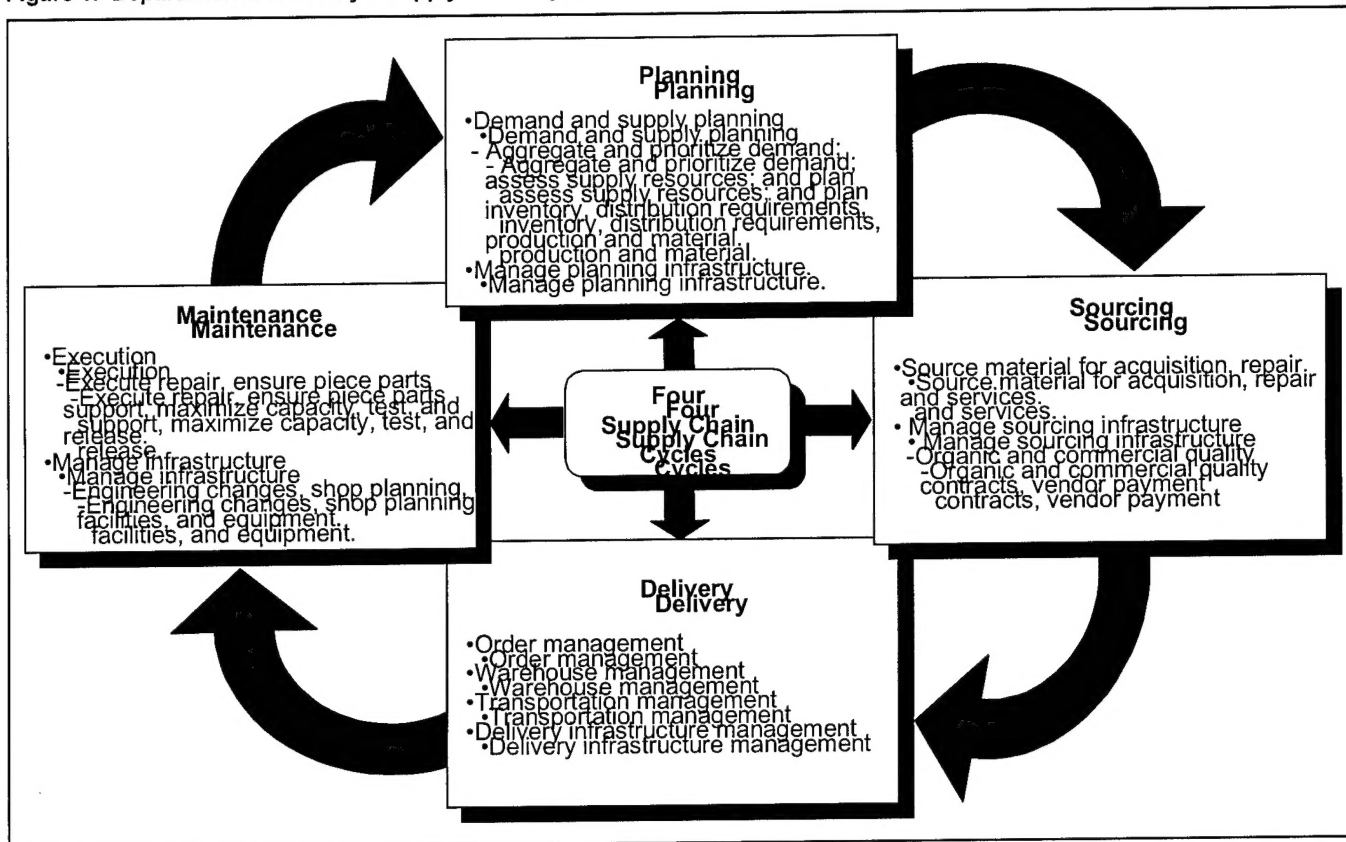
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[2] The Navy also relies on this pipeline for consumable parts that are used extensively to fix reparable parts and end items such as ships and aircraft. The Defense Logistics Agency provides most of the consumable parts that Navy repair activities use and handles a large portion of the warehousing and distribution of reparable parts.

The Department of the Navy recognizes that focusing on integrated supply chains can optimize logistics support and improve the management of secondary inventory. Navy analysis has shown that in the private sector, world-class firms have demonstrated superior responsiveness to customer needs through integrated supply chains at about half the cost of their average industry segments. The Department of the Navy has identified four interrelated management cycles in its supply chain:

- *Planning*, which includes the forecasting of demand for items, and supply and distribution planning.
- *Sourcing*, which includes identifying sources of inventory to support acquisition, repair, and other services.
- *Delivery*, which involves ordering, storage, and transportation.
- *Maintenance*, which includes repairing weapon systems and component parts.

Figure 1 illustrates these cycles and their interrelationships.

Figure 1: Department of the Navy's Supply Chain Cycles

Planning
- Demand and supply planning
  - Aggregate and prioritize demand;
    assess supply resources; and plan
    inventory, distribution requirements,
    production and material.
- Manage planning infrastructure.

Maintenance
- Execution
  - Execute repair, ensure piece parts
    support, maximize capacity, test, and
    release.
- Manage infrastructure
  - Engineering changes, shop planning,
    facilities, and equipment.

Four Supply Chain Cycles

Sourcing
- Source material for acquisition, repair
  and services.
- Manage sourcing infrastructure
  - Organic and commercial quality
    contracts, vendor payment

Delivery
- Order management
- Warehouse management
- Transportation management
- Delivery infrastructure management

Source: Department of the Navy section 347 report to Congress (June 16, 1999).

Since 1990, we have identified DOD's management of secondary inventories as a high-risk area because levels of inventory were too high and management systems and procedures were ineffective.[3] In addition, our financial statement audits have identified continuing significant problems with the integrity of DOD's inventory data. For example, we reported that inaccurate inventory data resulted from weaknesses in the

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[3] In 1990, we began a special effort to review and report on the federal program areas that we identified as high risk because of vulnerabilities to waste, fraud, abuse, and mismanagement. This effort, which was supported by the Senate Committee on Government Affairs and the House Committee on Government Reform, brought a much-needed focus to problems that were costing the government billions of dollars.

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Department's procedures relied on to maintain visibility over, and conduct physical counts of, on-hand inventories. Until these problems are effectively resolved, DOD's ability to reliably measure and assess performance will continue to be impaired.[4] While DOD has made some improvements, these general conditions still exist and this area remains on our high-risk list.[5] We have reported that adopting best business practices in inventory management along with improving the reliability of financial management information are key steps toward solving these problems.

Congress has recently taken specific actions to encourage DOD to adopt best commercial practices to improve its inventory management. The National Defense Authorization Act for Fiscal Year 1998 required the Director, Defense Logistics Agency, to develop and submit to Congress a schedule for implementing best commercial practices for the acquisition and distribution of nine categories of consumable-type supplies. The act also required that the schedule provide for the implementation of such practices to be completed by November 2000. As previously noted, the National Defense Authorization Act for Fiscal Year 1999 placed a similar requirement on the secretary of each military department. The military departments' schedules are to provide for the implementation of such best practices to be completed by October 17, 2003.

DOD is working to adopt best practices in its operations. In November 1997, the Secretary of Defense issued the Defense Reform Initiative report, which identified a number of reengineering initiatives aimed at adopting modern business practices to achieve world-class standards of performance. In addition, the DOD performance plan for fiscal year 2000 notes that the inventory supply system is larger than required to support today's smaller force structure and outlines goals to reduce inventory levels and streamline infrastructure. In March 1999, the Undersecretary of Defense (Acquisition Reform) stated that DOD needed "a revolution in business affairs...that embodies the best of modern business practices, the ability to access the full range and scope of technologies to meet the speed

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[4] *Results Act: DOD's Annual Performance Plan for Fiscal Year 1999* (GAO/NSIAD-98-188R, June 5, 1998), *DOD Financial Management: More Reliable Information Key to Assuring Accountability and Managing Defense Operations More Efficiently* (GAO/ NSIAD-99-145, Apr. 14, 1999), and *Department of Defense: Status of Financial Management Weaknesses and Actions Needed to Correct Continuing Challenges* (GAO/NSIAD-99-171, May 4, 1999).

[5] *Major Management Challenges and Program Risks: Department of Defense* (GAO/OCG-99-4, January 1999).

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and agility demanded by the new battlespace, and an absolute commitment to finding the best, most efficient means of delivering goods and services to our warfighters."

Department of the Navy's Schedule Generally Responds to the Act's Requirements

The Department of the Navy's schedule is generally responsive to the act. Specifically, the schedule describes initiatives that address the acquisition and distribution of secondary items managed by the Navy and the Marine Corps, and for some initiatives provides general information regarding completion dates. In submitting the schedule to Congress, the Secretary of the Navy stated that with few exceptions, implementation of the initiatives is expected to be completed by 2003. The schedule contains 25 initiatives that are primarily aimed at improving the Department of the Navy's planning, sourcing, delivery, and maintenance management processes. For example, the Direct Vendor Delivery Program is designed to find alternative commercial methods of supplying inventory items that would lower overall costs, and the Maintenance Cycle Time Reengineering initiative is focused on improving maintenance operations that will result in reduced inventory levels, repair times and repair costs.

The schedule describes the status of the initiatives as new, developing, or mature. According to Navy officials, six initiatives are new, that is in the earliest stages of development and generally exploratory in nature. Another 14 initiatives are categorized as developing, which means they have progressed to the point where viability of concept has been proven, business rules are being developed, and the initiatives will be expanded. The remaining five initiatives are considered mature because they have been under way for some time and are considered established business practices.

For each initiative, the schedule provides a general description, overall goals, planned actions and related milestones and describes desired outcomes. The schedule also estimates what portion of the existing inventory may be affected by each initiative. Many of the planned actions and milestones listed in the schedule relate to periodic program reviews, not specific implementation dates. For 10 initiatives, the schedule provides general information suggesting completion dates; while for 13 initiatives, specific completion dates could not be determined. For 2 of the 25 initiatives, completion dates were scheduled for after the 5-year time frame required by the act. Table 1 summarizes the information related to initiative status and completion dates. (See app. I for a more detailed description of each initiative.)

Table 1: Department of the Navy Initiatives' Status and Projected Completion Dates

Supply chain cycle targeted for improvement	Initiative	Status	Projected completion date
Planning	Enterprise Resource Planning	New	Not indicated
	Serial Number Tracking	Developing	Oct. 2003
	Long-Term Contracting	Mature	Not indicated
	Enhanced Sparing Model	Developing	2003
	Retention Level Review	Mature	March 2000
	Material Requirement Review	Developing	Not indicated
Sourcing	Total Asset Visibility, Navy	Mature	Sept. 2002
	Total Asset Visibility, Marine Corps	Mature	Not indicated
	Navy Electronic Commerce Online	Developing	June 1999
	Readiness Support System	New	Not indicated
	Contractor Logistics Support, Navy	Developing	Not indicated
	Contractor Logistics Support, Marine Corps	Developing	June 2001
	Direct Vendor Delivery	Developing	Not indicated
	Electronic Servmart Shopping	Developing	Dec. 2001
Delivery	Customer Wait Time	Developing	Not indicated
	One Touch Supply	Developing	Sept. 1999
	Regional Third Party Logistics Providers	New	Dec. 2000
	Third Party Logistics Providers-Retrograde Management	Developing	Not indicated
	Prime Vendor, Marine Corps	Developing	Not indicated
Maintenance	Organic Industrial Enterprise Logistics Support	New	Not indicated
	Maintenance Cycle Time Reengineering	New	June 2006
	Modernization of Maintenance Information Support System	Developing	Oct. 2005
	Manufacturing Resource Planning II	Developing	Sept. 2000
	Rapid Retargeting	New	Not indicated
	Logistics Engineering Change Proposals	Mature	Not indicated

Management Framework Is Key to Implementing Initiatives

Though generally responsive to the act's requirements, the schedule provides a management framework that lacks specific elements that are needed to assess implementation progress, measure success, and identify needed changes. The management framework described in the schedule provides an overall strategy that links the initiatives to three general improvement goals and four supply chain functions. In addition, each

initiative contains limited program evaluation and implementation milestones, such as dates for program reviews. The schedule does not provide, however, specific information needed to assess implementation progress, initiative results, or program evaluation plans. The Government Performance and Results Act can provide a model for developing an effective management framework to guide implementation of the initiatives and to provide Congress and DOD managers with information on progress and results.

The Schedule Provides a Limited Management Framework

In our past work, we reported that the lack of a management framework contributed to DOD's difficulty in implementing new initiatives. For example, we reported that DOD did not have an adequate management framework to clearly determine the progress being made in realizing the Total Asset Visibility initiative goals and that the initiative's strategic and implementation plans were inadequate. As a result, DOD managers did not have a clear picture of what the initiative's implementation status was or how initiatives within each service contributed to achieving overall DOD goals and objectives. In addition, we reported there was confusion over who would use the system and how it would be used.[6]

The Department of the Navy schedule presents the 25 initiatives within the context of an overall implementation strategy that addresses three improvement goals: enhancing customer support, reducing total ownership costs, and reducing infrastructure. As discussed earlier, this strategy also recognizes the relationship of these initiatives to four principal supply chain management functions and estimates the potential application of the initiatives to current inventory levels. This overall strategy is an important element of a management framework because it recognizes the interrelationship of the initiatives and their systemwide potential, which helps minimize potential conflicts and duplication of efforts. The schedule also indicates senior-level Navy officials will review the status of these initiatives semiannually and provide program updates to the Secretary of the Navy and to the Deputy Under Secretary of Defense for Logistics.

However, other framework elements necessary to assess implementation progress and measure success are not included in the schedule. Specifically, the schedule lacks objective and precise outcome measures

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[6] *Defense Inventory: DOD Could Improve Total Asset Visibility Initiative With Results Act Framework* (GAO/NSIAD-99-40, Apr. 12, 1999).

that could be used to assess implementation progress and results. For example, for the Organic Industrial Enterprise Logistics Support initiative, the schedule identifies reductions of inventory requirements, total costs in the supply chain, and repair costs as desired outcomes but does not quantify these goals. Without this specific information, it is impossible to determine the magnitude or impact these initiatives may have on overall logistics operations and objective information regarding the initiatives' implementation progress and achievement of their desired outcomes may not be available to Congress and to Defense managers.

Other management framework elements provided in the schedule are limited. Initiative goals and objectives in the schedule are not linked to specific DOD or Department of the Navy strategic logistics goals. Implementation milestones are in some cases very general, which will make it difficult to track implementation progress. Although the schedule contains dates for periodic program reviews for each initiative, it does not identify the general scope, methodology, or key issues to be addressed in these reviews.

Results Act Management Framework

The Results Act framework generally consists of establishing strategic plans, performance plans, and mechanisms for measuring program progress and results. Such a framework would include (1) establishing broad general initiative goals and objectives, (2) linking these goals to overall DOD goals and objectives, (3) establishing quantifiable performance measures to assess whether the initiatives are achieving desired results, (4) defining levels of accountability and responsibility for implementing the initiatives and identifying the resources that will be required to achieve goals, (5) establishing milestones necessary to measure progress toward full implementation, and (6) defining an evaluation plan for periodically comparing actual results to established goals and objectives. This information would allow Congress and other decisionmakers to measure initiatives' implementation progress and to determine whether the initiatives are achieving their desired results.

In addition to these potential benefits, considering the initiatives as interrelated efforts maximizes their systemwide improvement potential. Our prior work on best inventory management practices has shown that efforts to reengineer a logistics system are more successful when various logistics activities are viewed as a series of interrelated processes rather

than isolated functional areas.[7] For example, when one airline began changing the way it purchased parts from suppliers, it considered how those changes would affect mechanics in repair workshops. Additionally, airline officials described how a combination of supply chain improvements could lead to continuous improvements. They described how culture changes, improved data accuracy, and more efficient processes led to reductions in inventories and complexity of operations. These reductions can lead to further efficiencies and process improvements.

Conclusions

The schedule generally meets the requirements of the act by providing information on 25 initiatives that the Secretary of the Navy has advised Congress that, with few exceptions, are expected to be completed by 2003. In addition, the schedule presents an overall strategy to adopt best practices that is linked to general improvement goals and considers the improvement efforts in a supply chain management context. Executing this strategy and achieving the corresponding goals of reducing inventory levels while improving the responsiveness of the supply system to user needs will depend on the successful implementation of these initiatives. However, the management framework outlined in the schedule lacks specific elements needed to assess implementation progress, measure success, and identify needed changes. The Results Act provides a model for developing a more effective management framework that could provide this information and allow for meaningful evaluations of progress and results.

Recommendations

To provide a mechanism to improve the potential for successfully implementing the initiatives and measure results, we recommend that the Secretary of Defense direct the Secretary of the Navy to improve the management framework for implementing the 25 initiatives based on the principles embodied in the Results Act. Specifically, this management framework should include

- direct links to top-level DOD goals and objectives, including objective and precise outcome measures related to reducing pipeline time, improving customer service, and reducing total inventory, and

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[7] *Inventory Management: DOD Can Build on Progress by Using Best Practices for Reparable Parts* (GAO/NSIAD-98-97, Feb. 27, 1998).

- clearly defined initiative goals, quantifiable performance measures, implementation schedule milestones including specific implementation dates, and key issues and methodologies that will be used to periodically assess the overall impact the initiatives have achieved in reducing inventory levels while improving the responsiveness of the supply system to user needs.

Agency Comments and Our Evaluation

In commenting on a draft of this report, DOD concurred with our recommendations and stated that the Department of the Navy's schedule will be updated in the first quarter of 2000. This update will provide links between the schedule initiatives and the objectives set forth in DOD's Logistics Strategic Plan, quantifiable performance measures, and specific initiative milestone dates where practicable. DOD noted, however, that several Navy initiatives are exploratory in nature and until they are tested, proven successful, and funded, implementation—and specific implementation dates—cannot be assured. DOD's comments are included in their entirety as appendix II.

DOD did express concern that the draft report implied that the current management framework for implementing the initiatives is inadequate. DOD stated that the Navy's current management framework is guided by the DOD Logistics Strategic Plan and the Navy's High Yield Logistics Strategy and that the initiatives are subject to review within existing chains of command and at appropriate levels. Further, DOD cited results that have been achieved and asserted that such successes would not have been possible without an adequate management framework. We did not conclude that the Navy's management framework was inadequate. However, we believe it can be improved, particularly in areas related to measuring progress and results. We have revised our conclusion to more clearly reflect our position.

Scope and Methodology

We based our analysis of the extent to which the schedule responds to the requirements of the act on the information in the schedule, discussions with Navy and Marine Corps officials, and our prior work comparing DOD and private sector logistics practices.

In addition to determining whether the schedule responds to the act, we identified areas in which it could be improved to guide initiative implementation and improve management of secondary inventory items.
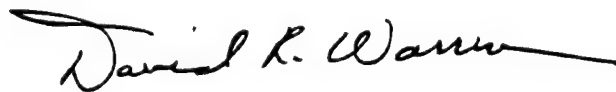
Specifically, we examined the schedule in terms of outcome-oriented Results Act principles to determine whether the schedule provides an overall strategy for adopting best practices and contains key management information to guide implementation. We did not assess the merits of the initiatives or the initiatives' likelihood for success.

We interviewed officials and obtained information about ongoing and planned initiatives at Department of the Navy Headquarters, Washington, D.C.; the Navy Supply and Navy Inventory Control Point in Mechanicsburg and Philadelphia, Pennsylvania, respectively; the Fleet Industrial Supply Center, San Diego and Naval Aviation Depot North Island, California. We also obtained information from the Marine Corps Headquarters, Logistics and Installations, Navy Annex, Arlington, Virginia; the Marine Corps Logistics Base, Albany, Georgia; and Camp Pendleton, California. In addition, we used information from our related reports that have been issued since 1993.

We conducted our review from November 1998 to June 1999 in accordance with generally accepted government auditing standards.

We are sending copies of this report to the appropriate congressional committees; the Honorable William Cohen, Secretary of Defense; the Honorable Richard Danzig, Secretary of the Navy; Admiral Jay Johnson, Chief of Naval Operations; General James Jones, Commandant, Marine Corps; Lieutenant General Henry T. Glisson, Director, Defense Logistics Agency; and Jacob Lew, Director, Office of Management and Budget. We will also make copies available to others upon request.

Please contact me on (202) 512-8412 if you or your staff have any questions concerning this report. Key contributors to this report are listed in appendix III.

David R. Warren, Director
Defense Management Issues

List of Congressional Committees

The Honorable John Warner
Chairman
The Honorable Carl Levin
Ranking Minority Member
Committee on Armed Services
United States Senate

The Honorable Ted Stevens
Chairman
The Honorable Daniel K. Inouye
Ranking Minority Member
Subcommittee on Defense
Committee on Appropriations
United States Senate

The Honorable Floyd Spence
Chairman
The Honorable Ike Skelton
Ranking Minority Member
Committee on Armed Services
House of Representatives

The Honorable Jerry Lewis
Chairman
The Honorable John P. Murtha
Ranking Minority Member
Subcommittee on Defense
Committee on Appropriations
House of Representatives

Summary of Navy Initiatives

The Department of the Navy's best practices implementation schedule lists 25 initiatives, including 22 for the Navy and 3 for the Marine Corps, and links the initiatives to the four supply chain cycles that they will affect. These cycles are planning, sourcing, delivery, and maintenance. According to Navy officials, the plan is dynamic and specific milestones and dates will be updated as necessary. This appendix summarizes the information contained in the schedule submitted to Congress on June 16, 1999. Because these initiatives are not centrally managed and tracked by the Department of the Navy, information regarding the current status of each initiative was not readily available and is therefore not presented in this appendix.

Planning Initiatives

Six initiatives relate to the planning cycle that includes demand forecasting and supply and distribution planning functions. Some of these initiatives are primarily related to information technology, while others deal with evaluations of current inventory policies. For example, the serial number tracking initiative is focused on developing technology to provide integrated maintenance and supply information on specific items in the Navy inventory. The Retention Level Review initiative is designed to reduce inventory by evaluating the amount of secondary material that should be retained based on a prudent level of risk.

Enterprise Resource Planning

Enterprise resource planning is a new initiative to explore the possibility of replacing existing supply and maintenance software with a complete new resource planning software package. According to the schedule, the concept development milestone was reached in March 1999, and a request for proposal was issued in May 1999. Proposal evaluation, metrics review, and an initial contract award were scheduled during the June-August 1999 period, and periodic program reviews are planned through October 2002.

Serial Number Tracking

This is a developing initiative to provide integrated maintenance management information systems. The existing maintenance and supply information systems are separate and distinct and collect different types of data. This initiative is designed to gather maintenance and supply data on specific inventory items and use that information to identify logistics deficiencies and develop least cost solutions and increase readiness. According to the schedule, between September 1999 and October 2003, the Navy plans to establish this capability at all levels of aircraft maintenance. Periodic program reviews are also planned during this period.

Long-Term Contracting	This is a mature initiative for reducing the amount of time it takes to place and receive an order for a secondary item. Under this initiative, the Navy establishes a long-term contractual relationship with a vendor, that permits the vendor to procure material to reduce production lead times and reduce the Navy's administrative lead times. The schedule shows the Navy planned to perform a metrics review in July 1999, complete a plan of action with milestones by September 1999, and conduct periodic program reviews through October 2002.
Enhanced Sparing Model	This initiative is to reduce inventories of spares by improving configuration data management and new modeling techniques. The initial effort will apply to the F/A-18E/F aircraft and selected subsystems during fiscal years 1999-2003. The schedule shows that through October 1999, the Navy plans to establish new allowance requirements, revise allowances, and identify a strategy for improved configuration data management software changes. After that date, milestones call for periodic program reviews through October 2002.
Retention Level Review	This is a mature initiative designed to evaluate the amount of secondary inventory that the Department of the Navy should retain. The goal is to reduce the amount of inventory the Navy holds while minimizing the risk that it would have to buy inventory that it previously decided was not needed. The schedule states that from July to December 1999, the Navy plans to conduct a metrics review, develop the concept, perform a 6-month program review, and analyze inventory levels. It plans to implement new inventory retention levels in March 2000 and perform annual program reviews through October 2002.
Material Requirements Review	Using this developing initiative, the Navy intends to identify the optimum amount of spare repair parts and consumables to be carried on combat logistics force ships by making trade-offs between inventory levels and transportation requirements. By reducing order and ship time, the potential exists to reduce inventory requirements without affecting readiness. According to schedule milestones, the Navy planned to identify alternatives between March and May 1999, make recommendations to proceed in October 1999, and perform periodic program reviews through October 2002.

Sourcing Initiatives

The schedule lists eight initiatives that relate to the sourcing cycle. The sourcing cycle includes acquiring items, repair services, and managing contracts. Some of these initiatives involve identifying and distributing assets in inventory, while others are designed to find alternative commercial methods of supplying inventory items at lower costs to the Department of the Navy. For example, Navy and Marine Corps total asset visibility initiatives are aimed at achieving visibility in wholesale, retail, and other inventories so that they can be redistributed, if necessary. Under the contract logistics support initiative, the Navy and the Marine Corps award contracts to commercial vendors who provide inventory directly to customers in time to meet their requirements, thus reducing the need for Department of Defense (DOD) resources.

Total Asset Visibility--Navy

The Total Asset Visibility program is a mature initiative, which began in the early 1990s.[1] The program is designed to link inventory information systems to improve asset visibility and provide an inventory redistribution capability. The initiative requires modifications to information systems and new business rules governing inventory redistribution procedures. According to the schedule, the Navy will complete a number of total asset visibility projects by September 2002, and make periodic program reviews through October 2002.

Total Asset Visibility--Marine Corps

This is also a mature initiative involving various efforts since 1991 to identify and distribute assets. DOD goals have been incorporated, development and testing of systems and procedures have been conducted, and visibility and redistribution systems have been fielded. Additional milestones in the schedule call for expanding implementation, completing prototype capability design, and performing a full program review in June 2001.

Navy Electronic Commerce Online

This developing initiative is to provide an electronic procurement system that is simple to use, is accessible through the Internet or other networks, and can be completely paperless. The Navy expects the system to make procurements faster, more accurate, and less expensive. According to the

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[1] *Defense Inventory: DOD Could Improve Total Asset Visibility Initiative With Results Act Framework* (GAO/NSIAD-99-40, Apr. 12, 1999).

schedule, the system has been deployed to Naval Inventory Control Point users, to some Navy Fleet Industrial Supply Centers, and to Marine Corps logistics bases. Further deployments were planned through June 1999, and program reviews are scheduled on an annual basis through October 2002.

Readiness Support Systems

This is a new initiative aimed at simplifying access to a wide variety of new business practices. The Navy intends to establish a single electronic clearinghouse to forward support requests to the correct contractor or DOD organizations. According to the schedule, testing was completed in May 1999, a prototype was to be implemented in August 1999, and periodic program reviews are planned through October 2002.

Contractor Logistics Support, Navy

Using this developing initiative, which is focused primarily on new acquisition weapon systems, the Navy negotiates a contract with a commercial vendor at or below the total cost of traditional supply support. The vendor is required to buy new inventory or buy out the Navy's existing inventory and provide material directly to customers. According to the schedule, the Navy has planned various phases and milestones from May to December 1999 related to business case and metrics development and software programming changes to support the initiative. The Navy plans to identify candidates for contractor logistics support in March 2000 and perform periodic program reviews through October 2002.

Contractor Logistics Support, Marine Corps

This is a developing initiative to use a commercial contractor for logistics support for a major weapon system. The contractor will be responsible for supplying repair parts, providing inventory forecasting, and technical support, and reporting on the status of orders. According to the schedule, the Marine Corps expects to award a sole-source contract with the original equipment manufacturer during the first quarter of fiscal year 2000. The Marine Corps has established milestones for initial operational testing and evaluation in the third quarter of fiscal year 2000, to be followed by quarterly program reviews and implementation of contractor logistics support for the new vehicle in the third quarter of fiscal year 2001.

Direct Vendor Delivery

This is a developing initiative to award contracts to commercial vendors to provide inventory directly to Navy customers in time to meet their needs, reducing the use of Navy resources. The Navy conducted business case development in May 1999 and planned a metrics review in July 1999. It also

plans to conduct a 6-month review to address barriers to success in October 1999, complete requests for process changes in December 1999, identify candidates for the initiative in March 2000, and perform periodic program reviews through October 2002.

Electronic Servmart Shopping

This is a developing initiative to implement an online ordering system that allows fleet customers to access and order materials from their computers and make payments using a purchase card. Orders can be delivered to customers or prepared for pickup the next day, eliminating the need for trips to the self-service Servmart stores. According to the schedule, the concept has been implemented at five facilities, and it will be implemented at three additional facilities in September 1999. The Navy plans a 6-month program review to address barriers to success in October 1999. The initiative will be expanded to remaining Fleet Industrial Supply Centers in December 2000 and to other Navy activities in December 2001. Periodic program reviews are scheduled through October 2002.

Delivery Initiatives

The schedule lists five initiatives under the delivery management cycle. The delivery cycle includes ordering, storage, and transportation of items in addition to managing the delivery infrastructure. Two initiatives deal with information technology systems and the other three use third-party providers for specific inventory items. For example, the Marine Corps' prime vendor initiative uses contractors to provide market ready or commercial supplies in medical, subsistence, automotive, and other business areas to a wide range of Marine Corps customers.

Customer Wait Time

This is a developing initiative for speeding up the delivery of parts that are needed for maintenance. The Navy intends to track the time from the ordering of a part to its delivery, develop a strategy for different shore facilities and deployment sites, then optimize the Navy's investment in spare parts. The schedule indicates a metrics review for July 1999 and periodic program reviews through October 2003.

One Touch Supply

This developing initiative allows customers to use the Internet to access various Navy databases at different facilities as a means to expedite the ordering and delivery of supplies. A customer can locate stock, input requisitions, perform technical screening, and check on requisition status.

The initiative was started in November 1997, and the Navy planned to add the capability to access Defense Logistics Agency databases in August 1999 and other Navy databases in September 1999. Periodic program reviews are scheduled through October 2003.

Regional Third Party Logistics Providers

This is a new initiative to use a single contractor, rather than many, to provide customers with inventory that is readily available in the commercial sector. A desired outcome of this initiative is lower inventory levels and related infrastructure. Norfolk/Tidewater, Virginia regional locations under consideration for this initiative include Public Works Center supply, Naval Shipyard shop stores, and in the future, Naval Air Station pre-expended bins. The schedule shows that in March and April 1999 the Navy was to complete a business case analysis and solicit vendor bids. Selection of a third-party provider is scheduled for September 1999 and a 6-month review is planned for October 1999. The strategy is to be assessed, refined, and expanded to other regions and to the Navy supply system between April and December 2000, and program reviews are scheduled through October 2002.

Third Party Logistics Providers–Retrograde Management

This developing initiative uses a single third-party logistics provider to reduce the amount of Navy reparable secondary items in the pipeline. The method for achieving this initiative is an A-76 competition in the area of transportation. Concept development and vendor solicitations were scheduled for April 1999, and a business case analysis was set for May 1999. A 6-month program review to address barriers to success and potential worldwide implementation is planned for December 1999. Periodic program reviews are planned between April 2000 and October 2002.

Prime Vendor, Marine Corps

This is a developing initiative to select vendors that can provide market-ready or commercial supplies to a wide range of customers. Prime vendor arrangements normally take advantage of existing commercial distribution networks that can be tailored to the individual customer. The Marine Corps has implemented and/or planned prime vendor programs in nine logistics business areas: subsistence, medical/pharmaceutical/dental, maintenance repair operations, industrial, automotive overseas, fleet automotive support, lumber/wood products, individual clothing and combat equipment, and food service equipment. The number of locations involved varied. The schedule states the Marine Corps plans to develop a future site

implementation plan between August and November 1999 and has ongoing actions to monitor and expand prime vendor opportunities.

Maintenance Initiatives

The schedule lists six initiatives relating to the maintenance cycle. This cycle includes repairing weapon systems and component parts and managing the maintenance infrastructure. Two of these initiatives are related to reengineering maintenance processes, two are information technology related initiatives, and two are focused on redesigning spare parts.

Organic Industrial Enterprise Logistics Support

This is a new initiative to assess commercial industry's interest in providing industrial support to the aviation depots and to solicit concepts for doing so. The initiative encompasses the entire logistics supply chain for material supply support to the Naval Aviation Depots. The Navy schedule calls for completion of a business case analysis and validation of any selected concepts in January 2000, with subsequent implementation of any proven concepts. The projected milestone date for award of an implementation contract is July 2000. Annual program reviews are planned through October 2002.

Maintenance Cycle Time Reengineering

This is a new initiative to reengineer selected Navy aviation maintenance processes. As a result of a Naval Air Systems Command's activity based cost analysis, the Navy established separate business process reengineering teams for material management, aviation depot planning and scheduling, and component repair. These teams are to document the current processes, determine what the reengineered processes should look like, and conduct business case analyses to support the merits of revised processes. The schedule calls for implementation of the reengineered processes in October 1999 and completion of aviation depot cellular repair organizations in March 2001 and reengineering initiatives in June 2006.

Modernization of Maintenance Information Support System

This developing initiative is to modernize the Navy information system used to manage organizational and intermediate-level aviation maintenance activities both ashore and afloat. The schedule indicates that the Navy began fielding the modernized system in fiscal year 1998 and that the system will be installed at a small percentage of maintenance activities by October 1999. Operational testing is scheduled for December 1999. The

system is scheduled to be installed at additional sites by October 2000 and at all sites by October 2005.

Manufacturing Resource Planning II

This is a developing initiative to improve resource planning through the use of an automated information management system. This system provides planning, scheduling, capacity, and other information to reduce repair cycle time and eliminate excess inventory. The Navy selected its aviation depot in Jacksonville, Florida, as the prototype location, and it plans to expand coverage to the other aviation depots by September 2000. Annual program reviews are planned through October 2002.

Rapid Retargeting

This new initiative invests in a technology to redesign obsolete components in order to provide new hardware for sea and aviation weapon systems. This concept may be applied to other DOD organizations and agencies that may have a similar requirement. According to the schedule, the Navy has developed criteria for selecting components for the program. Additionally, the schedule called for a review of program metrics in July 1999, a 6-month program review to address barriers to success in October 1999, and subsequent annual program reviews through October 2002.

Logistics Engineering Change Proposals

This is a mature initiative that uses engineering change proposals sponsored by the Naval Inventory Control Point to introduce enhanced technology, redesign items, or improve repair processes. The objective of this initiative is to reduce or eliminate support costs while maintaining or improving safety and performance. According to the schedule, a memorandum of agreement with fleet customers was scheduled to be completed in March 1999. Also, a metrics review was planned for July 1999, a 6-month program/budget review to address barriers to success was scheduled for October 1999, and periodic program reviews are scheduled through October 2002.

Comments From the Department of Defense

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ACQUISITION AND
TECHNOLOGY

Mr. David R. Warren
Director, Defense Management Issues
National Security and International
 Affairs Division
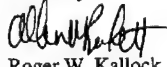U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Warren:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "DEFENSE INVENTORY: Improved Management Framework Needed to Guide Navy Best Practices Initiatives," dated August 26, 1999 (GAO Code 709382/OSD Case 1885). The DoD generally concurs with the draft report.

The DoD agrees with the draft report's conclusion that the Navy's schedule generally meets the requirements of Section 347 of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999. However, the DoD is concerned with the draft report's implication that the current management framework for implementing the initiatives included in that schedule is inadequate.

The current management framework is guided by the DoD Logistics Strategic Plan and the Navy's High Yield Logistics Strategy. The 25 initiatives are subject to review within existing chains of command and at appropriate levels. This structure has already produced notable results. In recent years, the Logistics Engineering Change Proposal program has led to a seven-fold increase in average mean time between failure. Long-Term Contracting has resulted in a 240-day reduction in repair turn-around time on the CH-53 gearbox. The Direct Vendor Delivery initiative on the Standard Central Air Data Computer has increased material availability from 70% to 99%, and decreased average customer wait time from 30.4 days to 1.4 days. These successes would not have been achieved without adequate management. The DoD does agree with the thrust of the the draft report recommendations calling for institutionalization of a more formal management process linking these intiatives with top-level DoD goals and objectives. Detailed comments on the recommendations are included in the attachment. The DoD appreciates the opportunity to comment on the draft report.

Sincerely,

Roger W. Kallock
Deputy Under Secretary
 of Defense (Logistics)

Attachment

GAO DRAFT REPORT DATED AUGUST 26, 1999
GAO CODE 709382/OSD CASE 1885

"DEFENSE INVENTORY: IMPROVED MANAGEMENT FRAMEWORK
NEEDED TO GUIDE NAVY BEST PRACTICE INITIATIVES"

DEPARTMENT OF DEFENSE COMMENTS TO
THE GAO RECOMMENDATIONS

RECOMMENDATION 1: The GAO recommended that the Secretary of Defense direct the Secretary of the Navy to improve the management framework for implementing the 25 initiatives based on the principles embodied in the Results Act. Specifically, the GAO recommended that the management framework include direct links to top-level DoD goals and objectives, including objective and precise outcome measures related to reducing pipeline time, improving customer service, and reducing total inventory. (p. 11/GAO Draft Report)

DOD RESPONSE: Concur. The Department of the Navy's schedule of best commercial inventory practice initiatives will be updated to reflect linkages between those initiatives and the objectives set forth in the Department of Defense (DoD) Logistics Strategic Plan. Update of the schedule will be completed during the first quarter of 2000.

RECOMMENDATION 2: The GAO also recommended that the Secretary of Defense direct the Secretary of the Navy to ensure that the management framework include clearly defined initiative goals, quantifiable performance measures, implementation schedule milestones including specific implementation dates, and the key issues and methodologies that will be used to periodically assess the overall impact the initiatives have achieved in reducing inventory levels while improving the responsiveness of the supply system to user needs. (p.11/GAO Draft Report)

DOD RESPONSE: Concur. As stated above, the Department of the Navy will complete an update of its schedule of best commercial inventory practice initiatives during the first quarter of 2000 to more clearly articulate linkage of Navy initiatives to DoD logistics objectives. Individual initiative metrics review and development is currently underway, and will be added to the schedule to serve as quantifiable performance measures. Additional specific initiative milestone dates will be added to the schedule where possible and practicable. It should be noted that several of the Navy initiative concepts are exploratory in nature. Until the concepts are tested, proven successful and funded, implementation -- and specific implementation dates -- cannot be assured.

GAO Contacts and Staff Acknowledgments

GAO Contacts

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Acknowledgments

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Related GAO Products

Inventory Management: More Information Needed to Assess DLA's Best Practice Initiatives (GAO/NSIAD-98-218, Sept. 2, 1998).

Inventory Management: DOD Can Build on Progress by Using Best Practices for Reparable Parts (GAO/NSIAD-98-97, Feb. 27, 1998).

Defense Inventory Management: Expanding Use of Best Practices for Hardware Items Can Reduce Logistics Costs (GAO/NSIAD-98-47, Jan. 20, 1998).

Inventory Management: Greater Use of Best Practices Could Reduce DOD's Logistics Costs (GAO/T-NSIAD-97-214, July 24, 1997).

Inventory Management: The Army Could Reduce Logistics Costs for Aviation Parts by Adopting Best Practices (GAO/NSIAD-97-82, Apr. 15, 1997).

Defense Inventory Management: Problems, Progress, and Additional Actions Needed (GAO/T-NSIAD-97-109, Mar. 20, 1997).

Inventory Management: Adopting Best Practices Could Enhance Navy Efforts to Achieve Efficiencies and Savings (GAO/NSIAD-96-156, July 12, 1996).

Best Management Practices: Reengineering the Air Force's Logistics System Can Yield Substantial Savings (GAO/NSIAD-96-5, Feb. 21, 1996).

Inventory Management: DOD Can Build on Progress in Using Best Practices to Achieve Substantial Savings (GAO/NSIAD-95-142, Aug. 4, 1995).